Technical Data Sheet

Bmc 5307

Thermoset Polyester
LyondellBasell Industries
Engineering Plastics

Product Description
BMC 5307 molding compound is a mineral filled, glass-fiber-reinforced polyester compound suitable for compression, transfer and stuffer injection molding. It is a medium impact material produced in extruded form for ease of handling. Other characteristics are good overall electrical properties and flame resistance. Typical applications include circuit breakers, transformer bobbins and motor end bells. BMC 5307 molding compound is produced in extruded form in a range on industrial colors. It is available in logs 12 inches in length and from 1" to 2 ½" in diameter Within this range, smalle r diameters are supplied as multiple extrusions and weight tolerances are plus or minus5%, up to a maximum of plus or minus 15 grams.

General			
Filler / Reinforcement	• Glass\Mineral		
Features	• Flame Retardant	• Good Electrical Properties	• Medium Impact Resistance
Uses	• Electrical/Electronic Applications		
UL File Number	• E27601		
Appearance	• Colors Available		
Forms	• BMC - Bulk Molding Compound		
Processing Method	• Compression Molding	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	2.01	2.00 g/cm³	ASTM D792
Water Absorption (24 Hr, 73°f (23°c))	0.10 %	0.10 %	ASTM D570
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength (Yield, Compression Molded)	9000 psi	62.1 MPa	ASTM D638
Flexural Strength (Compression Molded)	18000 psi	124 MPa	ASTM D790
Compressive Strength	24000 psi	165 MPa	ASTM D695
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact (Compression Molded)	4.5 ft·lb/in	240 J/m	ASTM D256
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Barcol Hardness	38	38	ASTM D2583
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed, Compression Molded	500 °F	260 °C	
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Dielectric Strength (Method A (short-time))	350 V/mil	14 kV/mm	ASTM D149
Arc Resistance	185 sec	185 sec	ASTM D495
Comparative Tracking Index (CTI)	600 V	600 V	UL 746A
Flammability	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Flame Rating			UL 94
0.06 In (1.6 Mm)	V-0	V-0	
0.13 In (3.2 Mm)	V-0	V-0	
0.25 In (6.4 Mm)	V-0	V-0	

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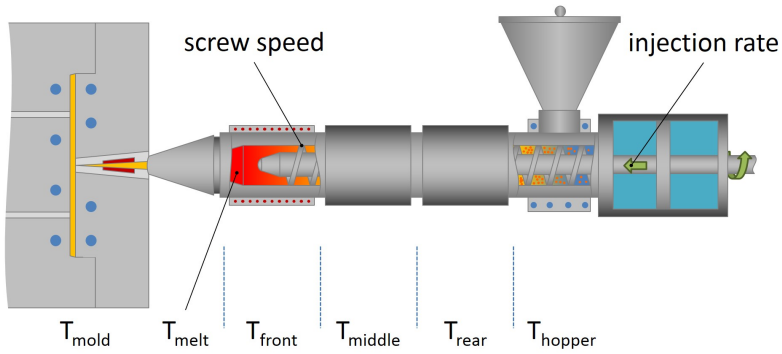

Injection	Nominal Value (English)	Nominal Value (SI)
Mold Temperature	280 to 350 °F	138 to 177 °C

Notes

These are typical property values not to be construed as specification limits.